Test Report
Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	1
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	28	8.63	150*150*150	2557.04	814.00	0.0225	36.18	35.81	35.74
2	30	28	8.51	150*150*150	2521.48	798.00	0.0225	35.47		
3	30	28	8.42	150*150*150	2494.81	805.00	0.0225	35.78		
4	30	28	8.69	150*150*150	2574.81	801.00	0.0225	35.60	35.67	
5	30	28	8.62	150*150*150	2554.07	811.00	0.0225	36.04		
6	30	28	8.52	150*150*150	2524.44	796.00	0.0225	35.38		

Results: 28-days Compressive strength of cement is 35.74 N/mm2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	2
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	28	8.73	150*150*150	2586.67	816.00	0.0225	36.27	35.90	35.83
2	30	28	8.61	150*150*150	2551.11	800.00	0.0225	35.56		
3	30	28	8.52	150*150*150	2524.44	807.00	0.0225	35.87		
4	30	28	8.79	150*150*150	2604.44	803.00	0.0225	35.69	35.76	
5	30	28	8.72	150*150*150	2583.70	813.00	0.0225	36.13		
6	30	28	8.62	150*150*150	2554.07	798.00	0.0225	35.47		

Results: 28-days Compressive strength of cement is 35.83 N/mm2

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	3
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	8.82	150*150*150	2613.33	818.00	0.0225	36.36	35.99	35.92
2	30	7	8.70	150*150*150	2577.78	802.00	0.0225	35.64		
3	30	7	8.61	150*150*150	2551.11	809.00	0.0225	35.96		
4	30	7	8.88	150*150*150	2631.11	805.00	0.0225	35.78	35.85	
5	30	7	8.81	150*150*150	2610.37	815.00	0.0225	36.22		
6	30	7	8.71	150*150*150	2580.74	800.00	0.0225	35.56		

Results: 28-days Compressive strength of cement is 35.92 N/mm2

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	4
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	8.91	150*150*150	2640.00	1168.00	0.0225	51.91	53.35	53.25
2	30	7	8.69	150*150*150	2574.81	1216.00	0.0225	54.04		
3	30	7	8.59	150*150*150	2545.19	1217.00	0.0225	54.09		
4	30	7	8.91	150*150*150	2640.00	1201.00	0.0225	53.38	53.16	
5	30	7	8.99	150*150*150	2663.70	1196.00	0.0225	53.16		
6	30	7	8.69	150*150*150	2574.81	1191.00	0.0225	52.93		

Results: 28-days Compressive strength of cement is 53.25 N/mm2

Note:

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Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	5
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	9.00	150*150*150	2666.67	1170.00	0.0225	52.00	53.44	53.34
2	30	7	8.78	150*150*150	2601.48	1218.00	0.0225	54.13		
3	30	7	8.68	150*150*150	2571.85	1219.00	0.0225	54.18		
4	30	7	9.00	150*150*150	2666.67	1203.00	0.0225	53.47	53.24	
5	30	7	9.08	150*150*150	2690.37	1198.00	0.0225	53.24		
6	30	7	8.78	150*150*150	2601.48	1193.00	0.0225	53.02		

Results: 28-days Compressive strength of cement is 53.34 N/mm2

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

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MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED

PROJECT MANAGEMENT & CONSULTANCY SERVICES

Test Report

Concrete Compresive strength

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-9/03
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri S K Chandra
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	6
Date	14-Nov-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	28	9.10	150*150*150	2696.30	1172.00	0.0225	52.09	53.53	53.43
2	30	28	8.88	150*150*150	2631.11	1220.00	0.0225	54.22		
3	30	28	8.78	150*150*150	2601.48	1221.00	0.0225	54.27		
4	30	28	9.10	150*150*150	2696.30	1205.00	0.0225	53.56	53.33	
5	30	28	9.18	150*150*150	2720.00	1200.00	0.0225	53.33		
6	30	28	8.88	150*150*150	2631.11	1195.00	0.0225	53.11		

Results: 28-days Compressive strength of cement is 53.43 N/mm2

Note:

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Project Division
Yelahanka Zone
Bangalore

Test Report
Consistency test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	9-Oct-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3	Trial 4	Trial 4
1	Weight of Cement	400	400	400	400	400
2	Percentage of water added (%)	27	28.5	29.5	30	30
3	Weight of Water (gm)	108	114	118	120	120
4	Initial Reading of Plunger (mm)	40	40	40	40	40
5	Difference (mm)	19	16	11	6.5	5.5

Results: Standard Consistency of Cement: 30.00%

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Fineness test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At site
Material	Cement
Sample No	1
Date	9-Oct-2018

Sl. No.	Determination	Trial 1	Trial 2
1	Weight of Cement before sieve (gm)	100	100
2	Weight of residue retained on 90um sieve (gm)	5.4	4.2
3	Percentage retained (%)	5.4	4.2
4	Average Percentage retained (%)	4.8	

Results: Residue of cement is: 4.8%

Comments: Maximum allowable residue by mass for ordinary portlad cement is 10%

Note:

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Asst Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Soundness test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 4031 (Part 3) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	9-Oct-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3
1	Initial Distance between the indicator points of Lechatelier mould	11	10	11
2	Final Distance between the indicator points of Lechatelier mould	14	15	15
3	Difference or expansion	3	5	4
4	Average Differences or Expansion in mm	4.00		

Results: Difference in Expansion of Cement: 4.0mm

Comments: Maximum allowable Expansion of cement is 10mm.

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Compressive strength test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kellappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Cement
Sample No	1
Date	19-Oct-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	7	-	0.85	70.6x70.6 x70.6	2415.5	184	4984.36	36.92	37.12
2	43	7	-	0.86	70.6x70.6 x70.6	2443.9	186	4984.36	37.32	

Results: 7-days Compressive strength of cement is 37.12N/mm^2

Comments: 7-days Compressive strength of cement should not be less than 33 N/mm^2

Note:

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Bangalore

Test Report
Compressive strength test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Cement
Sample No	1
Date	9-Nov-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	28	-	0.82	70.6x70.6 x70.6	2287.0	231	4984.36	46.34	46.75
2	43	28	-	0.835	70.6x70.6 x70.6	2316	235	4984.36	47.15	

Results: 28-days Compressive strength of cement is 46.75N/mm^2

Comments: 28-days Compressive strength of cement should not be less than 43 N/mm^2

Note:

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Project Director
Yelahanka Zone
Bangalore

Test Report
Gradation test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	1
Date	9-Oct-2018

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification for PQC
2	4.75 mm	15	7.50	7.50	92.50	90-100	
3	2.36 mm	18	9.00	16.50	83.50	75-100	
4	1.18 mm	14	7.00	23.50	76.50	55-90	
5	600 µ	43	21.50	45.00	55.00	35-59	
6	300 µ	59	29.50	74.50	25.50	8-30	
7	150 µ	38	19.00	93.50	6.50	0-10	

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Test Report
Gradation test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	2
Date	19-Feb-2019

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification for PQC
2	4.75 mm	14	7.00	7.00	93.00	90-100	
3	2.36 mm	23	11.50	18.50	81.50	75-100	
4	1.18 mm	18	9.00	27.50	72.50	55-90	
5	600 µ	42	21.00	48.50	51.50	35-59	
6	300 µ	62	31.00	79.50	20.50	8-30	
7	150 µ	32	16.00	95.50	4.50	0-10	

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Test Report
Gradation test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	9-Oct-2018

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	Percentage of weight Retained (%)	Percentage of weight retained (%)	Passing		Remarks
					Test Resul	Gradation Limits as per	
1	31.50	0.00	0.00	0.00	100.00	100	
2	26.50	495.00	12.38	12.38	87.63	85-95	
3	19.00	328.00	8.20	20.58	79.43	68-88	
4	9.50	637.00	15.93	36.50	63.50	45-65	
5	4.75	425.00	10.63	47.13	52.88	30-55	
6	0.60	956.00	23.90	71.03	28.98	8-30	
7	0.15	854.00	21.35	92.38	7.63	5-15	
8	0.08	232.00	5.80	98.18	1.83	0-5	

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Test Report
Gradation test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	2
Date	19-Feb-2019

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	Percentage of weight Retained (%)	Percentage of weight retained (%)	Passing		Remarks
					Test Result	Gradation - Limits as per	
1	31.50	0	0.00	0.00	100.00	100	
2	26.50	493	12.33	12.33	87.68	85-95	
3	19.00	325	8.13	20.45	79.55	68-88	
4	9.50	631	15.78	36.23	63.78	45-65	
5	4.75	415	10.38	46.60	53.40	30-55	
6	0.60	948	23.70	70.30	29.70	8-30	
7	0.15	839	20.98	91.28	8.73	5-15	
8	0.08	258	6.45	97.73	2.28	0-5	

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Water absorption test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	7-Oct-2018

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of SSD sample	W_1 g	761	763	
2	Aggregates Immersed in	W_2g	2035	2040	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1274	1277	
4	dry aggregate in Air	W_3 g	2070	2065	
5	Volume of the Aggregate	$W_3 - W_s$	796	788	
6	Aggregate	W_4g	2031	2036	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.55	2.58	2.57
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.63	2.68	2.68
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.92	1.42	1.67

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report

Water absorption test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-19/QR/P-9/03
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse Aggregates
Sample No	2
Date	17-Feb-2019

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Immersed in Water	W_1 g	765	765	
2	Aggregates Immersed in	W_2g	2025	2030	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1260	1265	
4	dry aggregate in Air	W_3 g	2060	2055	
5	Volume of the Aggregate	$W_3 - W_s$	800	790	
6	Aggregate	W_4g	2021	2026	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.53	2.56	2.55
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.66	2.66	2.66
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.93	1.43	1.68

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

Note:

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Bangalore

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MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED

PROJECT MANAGEMENT & CONSULTANCYSERVICES

Test Report
Impact test

Project Name	1. Improvement of drain at thirumenahalli village main road in ward no 05 byatarayanapura sub division.2) Improvement of road and drain at thirumenahalli junction to agrahara layout govt hospital in ward no05 byatarayanapura sub division 3)Improvement of roads and drain at chokkanahalli village main road cross road in ward no 05 byatarayanapura sub division 4) Improvement of roads and drain at markendeyanagara main road and cross roads in ward no 05 byatarayanapura sub division 5) Improvement of roads and drain at sriraj layout main road and cross road in ward no 05 byatarayanapura sub division 6) Improvement of roads and drain at kogilu surrounding in ward no 05 byatarayanapura sub division 7)Improvement of roads and drain at agrahara village cross roads in ward no 05 byatarayanapura sub division 8) Improvement of roads and drain at agrahara layout kallappa reddy main road in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2018-
Mix Type	Plain cement concrete
Contractor	Sri. S.K. CHANDRA
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Coarse aggregates
Sample No	1
Date	7-Oct-2018

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1305	1307
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	345	347
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	78	75
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	267	272
6	Aggregate Impact Value (w4 / w3)x100	%	22.61	21.61
7	Specified Limit	%	45.00	

Results: Average Aggregate Impact Value: **22.11** %

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